

What is claimed is:

1. A method of incorporating a pharmaceutical agent into a scaffold, the method comprising:
 - a. selecting a scaffold,
 - b. selecting a pharmaceutical agent;
 - c. dissolving the pharmaceutical agent into a mixture containing an organic solvent;
 - d. bringing the solution containing the pharmaceutical agent and the organic solvent into contact with the scaffold; and
 - e. removing a portion of the solvent.
2. The method of claim 1 wherein the scaffold is a composite scaffold.
3. The method of claim 2 wherein the composite scaffold has a foam element.
4. The method of claim 3 wherein the foam element is manufactured from a 0.5% polymer solution.
5. The method of claim 1 wherein the scaffold is made by lyophilization.
6. The method of claim 1 wherein the scaffold is made from aliphatic polyesters.
7. The method of claim 6 wherein the aliphatic polyesters are homopolymers.
8. The method of claim 6 wherein the aliphatic polyesters are copolymers.

9. The method of claim 6 wherein the aliphatic polyesters are manufactured from monomers selected from the group consisting of: lactic acid, lactide, glycolic acid, glycolide, ε-caprolactone, p-dioxanone, trimethylene carbonate, polyoxaesters, d-valerolactone, β-butyrolactone, ε-decalactone, 2,5-diketomorpholine, pivalolactone, α,α-diethylpropiolactone, ethylene carbonate, ethylene oxalate, 3-methyl-1,4-dioxane-2,5-dione, 3,3-diethyl-1,4-dioxan-2,5-dione, γ-butyrolactone, 1,4-dioxepan-2-one, 1,5-dioxepan-2-one, 6,6-dimethyl-dioxepan-2-one and 6,8-dioxabicyclooctane-7-one.
10. The method of claim 1 wherein the scaffold is made from materials selected from the group consisting of polylactic acid, polyglycolic acid, polycaprolactone, polydioxanone, trimethylene carbonate, polyvinyl alcohol, polyoxaesters, copolymers or blends thereof.
11. The method of claim 1 wherein the scaffold is made from a polyglycolic acid – polycaprolactone copolymer.
12. The method of claim 1 wherein the pharmaceutical agent is one that is affected by sterilization.
13. The method of claim 1 wherein the pharmaceutical agent is one that is denatured by organic solvents.
14. The method of claim 1 wherein the pharmaceutical agent is a growth factor.

15. The method of claim 1 wherein the pharmaceutical agent is an extracellular matrix protein.
16. The method of claim 1 wherein the pharmaceutical agent is a biologically relevant peptide fragment.
17. The method of claim 1 wherein the pharmaceutical agent is a biologically relevant peptide fragment of the TGF- β family.
18. The method of claim 17 wherein the peptide fragment is selected from the group consisting of TGF- β 1, 2 and 3.
19. The method of claim 1 wherein the pharmaceutical agent is a bone morphogenic protein.
20. The method of claim 19 wherein the bone morphogenic protein is selected from the group consisting of BMP-2, -3, -4, -5, -6, -11, -12, and -13.
21. The method of claim 1 wherein the pharmaceutical agent is selected from the group consisting of: fibroblast growth factors-1 and -2, platelet-derived growth factors-AA, and -BB, platelet rich plasma, insulin growth factors IGF-I, II, growth differentiation factors GDF-5, -6, -8, -10, -15, vascular endothelial cell-derived growth factor VEGF, pleiotrophin, endothelin, nicotinamide, glucagon-like peptide-I and II, exendin-4, retinoic acid, parathyroid hormone, tenascin-C, tropoelastin, thrombin-derived peptides, cathelicidins, defensins, laminin, biological peptides containing cell- and

heparin-binding domains of adhesive extracellular matrix proteins, antibodies, mimetobodies, MAPK inhibitors, and combinations thereof

22. The method of claim 1 wherein the organic solvent is an alcohol.
23. The method of claim 1 wherein the organic solvent is an ether.
24. The method of claim 22 wherein the alcohol has four or more carbon atoms.
25. The method of claim 24 wherein the alcohol is t-butanol.
26. The method of claim 1 wherein the organic solvent is used in a concentration of at least about 1%.
27. The method of claim 26 wherein the organic solvent is used in a concentration of at least about 3%.
28. The method of claim 27 wherein the organic solvent is used in a concentration of at least about 6%.
29. The method of claim 1 wherein the organic solvent is used in an amount that is not sufficient to denature the pharmaceutical agent.
30. The method of claim 1 wherein before the pharmaceutical agent and the scaffold are brought into contact with each other they are separately sterilized.
31. The method of claim 30 wherein in the step of bringing the pharmaceutical agent into contact with the scaffold such is done aseptically.
32. The method of claim 1 wherein all of the solvent is removed.

33. The method of claim 1 wherein the solvent is removed by lyophilization.
34. The method of claim 1 wherein the pharmaceutical agent is selected from the group consisting of VEGF-121 and a p38 kinase inhibitor or combinations thereof.
35. A method of transplanting mammalian cells into a patient, the method comprising:
 - a. selecting a scaffold,
 - b. selecting a pharmaceutical agent;
 - c. dissolving the pharmaceutical agent into a mixture containing an organic solvent;
 - d. bringing the solution containing the pharmaceutical agent and the organic solvent into contact with the scaffold;
 - e. removing a portion of the solvent;
 - f. seeding the scaffold with mammalian cells; and
 - g. transplanting the scaffold into the patient.
36. A method of transplanting mammalian cells into a patient, the method comprising:
 - a. selecting a scaffold,

- b. selecting a pharmaceutical agent;
 - c. dissolving the pharmaceutical agent into a mixture containing an organic solvent;
 - d. bringing the solution containing the pharmaceutical agent and the organic solvent into contact with the scaffold;
 - e. removing a portion of the solvent;
 - f. transplanting the scaffold into the patient; and
 - g. seeding the scaffold with mammalian cells.
37. A scaffold that has been impregnated with a pharmaceutical agent using a process comprising:
- a. selecting a scaffold,
 - b. selecting a pharmaceutical agent;
 - c. dissolving the pharmaceutical agent into a mixture containing an organic solvent;
 - d. bringing the solution containing the pharmaceutical agent and the organic solvent into contact with the scaffold; and
 - e. removing a portion of the solvent.

38. A process of manufacturing a sterile scaffold containing a pharmaceutical compound comprising:
- a. sterilizing the scaffold;
 - b. sterilizing the pharmaceutical compound; and
 - c. aseptically incorporating the pharmaceutical compound into the sterile scaffold.